

A CLINICAL STUDY OF TUBAL ECTOPIC PREGNANCY IN A TERTIARY CARE CENTER

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Abstract

Background: Tubal ectopic pregnancy is a common life-threatening condition. Its diagnosis is frequently missed and should be considered in any women in the reproductive age group presenting with abdominal pain or vaginal bleeding. **Aims:** To determine the incidence, clinical presentation, risk factors, diagnostic modalities, treatment and morbidity and mortality associated with tubal ectopic pregnancy. **Materials and Methods:** Retrospective analysis of case histories of patients admitted with tubal ectopic pregnancy at MGM Medical College and Hospital, Aurangabad, MS was done. The analysis regarding : age, parity, gestational age, risk factors, clinical presentation, findings on ultra-sonogram and at surgery and morbidity associated with tubal ectopic pregnancy was made. **Results:** A total 45 cases of tubal ectopic pregnancy were operated during 2012-2016 with incidence of 6.2/1000 deliveries. The commonest

risk factors present were history of abortion (40%), history of IUCD (17%) and history of tubal surgery (8.8%). The commonest symptoms were abdominal pain (88.8%), amenorrhea (84.4%) and bleeding per vaginum (71.1%). Most common age group associated with tubal ectopic pregnancy was 20-25yrs (31.1%) & 25-30yrs (28.8%). The mainstay of management was laparoscopic salpingectomy (99%) and salphingo-oophorectomy (1%). Morbidity included anaemia (44.4%), blood transfusion (55.5%) and wound infection (33.3%). No maternal mortality was observed. **Conclusion:** Early diagnosis, identifying risk factors and management of tubal ectopic pregnancy will help to avoid one of the life threatening condition.

Keyword: tubal ectopic pregnancy, amenorrhea, bleeding per vaginum , salpingectomy.

1. Introduction

Tubal ectopic pregnancy is one of the most life threatening emergencies in early pregnancy. By definition ectopic pregnancy is one in which the fertilized egg is implanted at sites other than normal uterine cavity. It leads to fetal wastage and increases maternal morbidity and mortality and significantly compromises the fertility of a patient. In developing countries, a majority of hospital based studies have reported ectopic pregnancy case fatality rates of around 1%-3%, 10 times higher than those reported in developed countries⁽¹⁾. Majority of patients exhibit a wide variety of symptoms and mimic many other

diseases affecting the abdominal organs ⁽²⁾. Early diagnosis of tubal ectopic pregnancy presents a challenging problem. A knowledge of the associated risk factors helps identify women at higher risk in order to facilitate early and more accurate diagnosis. The incidence of tubal pregnancy has increased in last decade due to better diagnostic modalities, which helps to avoid tubal rupture and can be treated conservatively.

This retrospective analysis was done to determine the incidence, clinical presentation, risk factors, diagnostic modalities, treatment, morbidity and mortality associated with tubal ectopic pregnancy in a tertiary care hospital.

2. MATERIALS AND METHODS

This was a retrospective study of tubal ectopic pregnancies at MGM Hospital, Aurangabad,

from June 2012 to June 2016. The case sheets of the patients with tubal ectopic pregnancy were traced through the data noted in the pathology department, labour ward, OT registers and record section. Information regarding total number of deliveries in the study period was noted. The complete analysis regarding age, parity, gestational age, associated risk factors, clinical presentation, diagnostic tools used, treatment options and associated risk of morbidity and mortality was made. All the surgeries were partial / total salpingectomy done by open laparotomy and spinal/general anesthesia was used in all the cases. Histopathological correlation was considered as final diagnostic tool.

3. RESULTS

During the study period of 4 years, there were 7200 number of deliveries in our hospital and 45 cases of tubal ectopic pregnancies were operated giving the incidence of 6.2/1000 deliveries. A majority of the patients

belonged to age group of 20-25 years (31.1%) while 28.8% patients belong to

25-30 years (**TABLE 1**). 13.3% were primiparas and 86.6 % were multiparas (**TABLE 2**). The incidence was more in 5-6 weeks (91.1%) weeks of gestation.

4. TABLE 1: Age distribution for tubal ectopic pregnancy

AGE GROUP	NUMBER OF CASES	PERCENTAGE
Less than 20 years	02/45	4.4%
20-25 years	14/45	31.1%
25-30 years	13/45	28.8%
30-35 years	11/45	24.4%
35-40 years	05/45	11.1%

TABLE 2: Parity

PARITY	NO. OF CASES	PERCENTAGE
Primi-para	7/45	15.5%
Parity 1-2	30/45	66.6%
Parity 3-4	6/45	13.33%
Parity > 4	2/45	4.4%

CHART 1: Most common risk factors

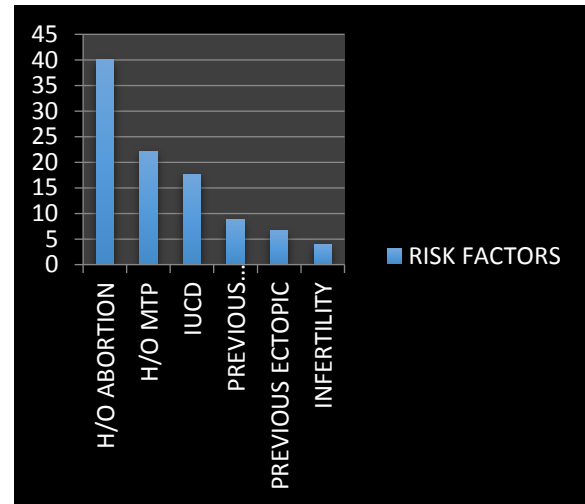


CHART 2: Clinical presentation

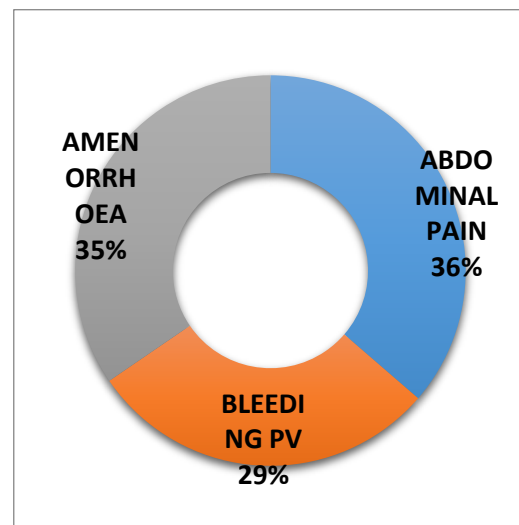
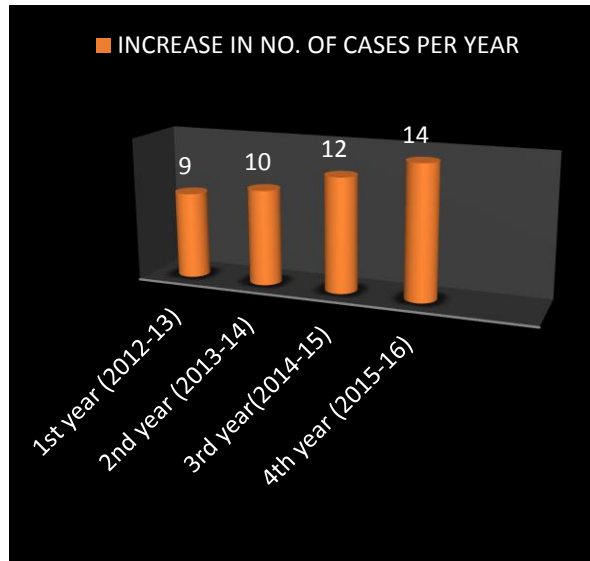


CHART 3: Increase in incidence rate of tubal ectopic pregnancy



Most common risk factors observed were history of previous spontaneous and induced abortion (40.3%), 4.4% had a history of infertility. 22.2% gave history of MTP, 17.7% used intrauterine contraceptive device mainly Copper-T. History of previous surgeries (tubectomy, LSCS) was observed in 8.8% and previous ectopic pregnancy in 6.6% of patients. (CHART 1)

Common presenting complaints were abdominal pain 88.8% followed by amenorrhoea 84.4% and bleeding PV 71.1% (CHART 2). Urinary pregnancy test was positive and ultrasonography gave the direct or indirect evidence of tubal pregnancy in all the cases. β -HCG levels were done in all (45) the patients out of which only 2 showed normal range for 3 weeks of gestation. Rest all were significantly raised.

The incidence of right sided (64.4%) tubal ectopic was more common than left side (35.5%). In all the cases salpingectomy was done of which more common was unilateral salpingectomy (88.8%). The morbidity included anemia (44.4%), blood transfusion 55.5% and wound infection (33.3%). The gradual increase in incidence of tubal ectopic pregnancy was noted per year. (CHART 3)

4. DISCUSSION

The prevalence of ectopic pregnancy among women who go to an emergency department with first trimester bleeding, pain or both ranges from six to 16 percent⁽⁴⁾. In the present study, incidence of tubal ectopic pregnancy was 6.2/1000 deliveries. Similar studies were carried out by Rashmi Gaddagi and AP Chandrashekhar (2012), the incidence was 1:399 pregnancies⁽⁵⁾. In Porwal Sanjay et al (2012) study, the incidence was 2.46/1000 deliveries⁽⁶⁾.

A majority of the patients (31.1%) belonged to the age group of 20-25 years in our study. Similar results were found in Khaleeqe et al (2001) study except for etiology⁽⁹⁾. In this study 86.6% women were multiparous using IUCD while 13.3% were primi. Multiparous women using

IUCD were found more prone to have ectopic pregnancy (61%) in LaxmiKarki et al (2011) study ⁽⁸⁾.

The commonest risk factors included previous abortions, tubal ligations, previous surgeries, infertility, use of IUD, previous LSCS. Similar risk factors were noted in various other studies ⁽⁷⁾. Roussos D et al (2001) in their study observed that rupture of the tube is more often observed in women with a history of ectopic pregnancy ⁽⁹⁾. The commonest presenting complaints were abdominal pain, amenorrhea and abnormal vaginal bleeding.

In Porwal Sanjay et al study, 87.5% reported with pain in abdomen, 67.5% bleeding per vaginum and 90% of cases had history of amenorrhea. These features help in early diagnosis of ectopic pregnancies ⁽⁹⁾. The urinary pregnancy test, serum β -hCG and ultrasonography were the diagnostic tools used for diagnosis. Studies have shown that USG should be the initial investigation for symptomatic women in their first trimester; Serial measurement of β -hCG and progesterone concentrations may be useful when the diagnosis remains unclear ⁽¹⁰⁾. As medical management needs extremely close follow up & hospitalization, surgical management is still the method of choice in our country. Laparoscopy and medical therapy have now emerged as the widely used

therapeutic modalities with great success in terms of reduced morbidity, shorter hospital stay and conservation of fertility.

Right sided tubal pregnancy was present in 29 (64.4%) cases and left tubal involvement in 16 (35.5%) cases, consistent with other studies ⁽¹¹⁾. Morbidity included- anemia, blood transfusion and wound infection. By reducing and identifying the risk factors and catching the patients at the earliest it is possible to improve the prognosis so far as morbidity, mortality and fertility are concerned ⁽¹²⁾. No maternal mortality was found in our study, consistent with A.Abbas and H.Akram study ⁽¹³⁾.

5. SUMMARY AND CONCLUSION

The study on tubal ectopic pregnancy which was conducted in MGM Hospital, Aurangabad concluded with the following results-

1. The most common age group associated was 25-30 years.
2. More common in multiparous women using IUCD.
3. H/o abortion, MTP, Use of IUD increases the risk of ectopic pregnancy.

4. Most common complaints included abdominal pain, amenorrhoea and vaginal bleeding.
5. There was gradual year wise increase in incidence rate.

Educating people especially those at higher risk, regarding safe abortions, use of contraceptives can go a long way in decreasing the incidence of tubal ectopic pregnancy. Early diagnosis and prompt conservative surgical or medical management will not only help in reducing maternal mortality and morbidity but also go a long way in preserving future fertility.

6. REFERENCES

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